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Patent Claims

1. A turbomachine (1), having an inner casing (5) and a rotatably mounted turbine shaft (3), characterized in that the inner casing (5) and the turbine shaft (3) are made from different materials, the inner casing (5) being made from a material with a lower hot strength than the material from which the turbine shaft (3) is produced, the turbine shaft (3) being produced from a chromium steel containing 9 to 12% by weight chromium, and the inner casing (5) being produced from a chromium steel containing 1 to 2% by weight chromium.
2. The turbomachine (1) as claimed in claim 1, characterized in that the inner casing (5) and the turbine shaft (3) at least in part have regions which are designed for use at temperatures of over 550°C.
3. The turbomachine (1) as claimed in either of claims 1 and 2, which is designed as a steam turbine.
4. The turbomachine (1) as claimed in one of claims 1 to 3, which is designed as a high-pressure partial turbine.
5. The turbomachine (1) as claimed in one of claims 1 to 3, which is designed as an intermediate-pressure partial turbine.
6. The turbomachine (1) as claimed in one of claims 1 to 3, which is designed as a combined high-pressure and intermediate-pressure partial turbine.
7. The turbomachine (1) as claimed in one of claims 1 to 3, which is designed as a combined intermediate-pressure and low-pressure partial turbine.